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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,945	11/26/2003	John J. Price	97017-00169 (ETH-5089)	9633

7590  
Ralph W. Selitto, Jr.  
McCarter & English, LLP  
Four Gateway Center  
100 Mulberry Street  
Newark, NJ 07102

06/27/2007

EXAMINER
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TYSON, MELANIE RUANO

ART UNIT	PAPER NUMBER
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3731

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06/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/722,945

Applicant(s)

PRICE, JOHN J.

Examiner

Melanie Tyson

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.  
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.  
4a) Of the above claim(s) 13 and 15-21 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-12, 14, and 22-30 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to applicant's amendment received on 02 April 2007.

#### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-12 and 14 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Election/Restrictions***

2. Newly submitted claim 21 is directed to an invention that is independent or distinct from the elected invention of the previous restriction requirement: claim 21 reads on non-elected species II (see Figures 6 and 7). Accordingly, claim 21 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-8, 12, 14, 22, 26, and 30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dery (3,394,704). Dery discloses an armed suture (see entire document) comprising a needle (5) having a pair of opposed ends (for example, see Figure 1), a blind hole (9) extending longitudinally and having a conical tip (for example, see Figure 3), a monofilament suture (6; for example, see column 3, line18), and an adhesive (11) bonding the suture

(6) to the needle (5). It is inherent that the adhesive has a viscosity permitting the suture (6) to be inserted into the suture hole (9) since it is well known that adhesives are in a liquid form until they dry.

It is noted that the applicant is invoking 112, 6<sup>th</sup> paragraph, in that the means for increasing the bond between the adhesive (11) and the hole (9) includes a rough surface. Dery discloses that the bonding agent is bonded to the "relatively smooth" wall of the bore (for example, see column 2, lines 66-68). Dery further discloses the hole (9) is drilled (for example, see column 2, lines 59-61) and does not disclose that the hole (9) is polished or finished (inherently unpolished). This indicates that the wall of the hole is not completely smooth, thus contains rough areas. Therefore, it is inherent that the wall includes a rough surface. However, in the alternative, it is well known in the art that a roughened surface will increase the bond between the hole and the adhesive. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the hole of Dery with a rough surface in order to increase the bond strength between the hole and the adhesive (for example, see Martinez, Patent No. 4,127,133, column 7, lines 58-64; Martinez discloses a roughened needle bore improves adhesion characteristics, therefore, a needle bore may be modified to change needle pull-off values).

Claims 2,3, and 5-8 are being treated as product by process limitations, in that "said adhesive is curable by exposure to magnetic radiation" and "said adhesive is curable by a second curative agent" refer to the process of curing the adhesive and not to the final product created. As set forth in MPEP 2113, "Even though product-by-

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process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695,698,227 USPQ 964,966 (Fed. Cir. 1985). Examiner has evaluated the product claims without giving much weight to the method of its manufacture. Therefore, in this case, an armed suture as described above wherein the adhesive is curable by exposure to electromagnetic radiation and by a second curative agent is directed to the method of making the armed suture and not to the final product made. It appears that the product disclosed by Dery would be the same or similar as that claimed; especially since both applicant's product and the prior art product have the same final structure of an armed suture comprising a needle, a blind hole, a suture, and an adhesive bonding.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 4 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dery in view of Dabir (5,891,164). Dery discloses a device as described above, however, Dery fails to disclose the specific adhesive used. Dabir discloses a surgical needle (see entire document). Dabir teaches using cyanoacrylate to secure a suture material into a bore of a needle (for example, see column 4, line 36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize cyanoacrylate as the adhesive in the device of Dery as taught by Dabir, since it is a well known surgical grade adhesive (for example, see column 4, lines 32-37), thus will provide a safe and effective attachment between the suture and needle.

With further respect to claims 27-29, applicant discloses that adhesives other than LOCTITE 4302, which uses cyanoacrylate as a catalyst, is simply exemplary and that other adhesives could be employed. It is well known in the medical art to utilize LOCTITE as an adhesive (for example, see Korthoff's Patent No. 5,156,615, column 9, lines 18-36) and it is well known that different LOCTITE adhesives provide different grades of strength. Therefore, it would have been obvious to one of ordinary skill in the art to utilize LOCTITE 4302, which uses cyanoacrylate as a catalyst, in instances requiring such an adhesive strength.

8. Claims 1, 9-11, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Messer (3,910,282) in view of Dabir. Messer discloses an armed suture (see entire document) comprising a needle (12) having a pair of opposed ends

(for example, see Figure 1), a blind hole (13) extending longitudinally and having a conical tip and a first diameter proximate the surface that is greater than a second diameter distal to the first diameter (for example, see Figure 5), and a suture (11), wherein the end of the needle (12) is swaged inwardly (for example, see Figure 6).

Messer fails to disclose an adhesive. Dabir discloses a surgical needle (see entire document). Dabir teaches using an adhesive, cyanoacrylate, to secure a suture material into a bore of a needle (for example, see column 4, line 36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an adhesive, such as cyanoacrylate, in the device of Messer as taught by Dabir.

It is noted that the applicant is invoking 112, 6<sup>th</sup> paragraph, in that the means for increasing the bond between the adhesive and the hole includes a rough surface. It is inherent that the hole of Messer includes a rough surface, since Messer discloses the hole is formed by lasers, drilling, etching, or other metal working techniques (for example, see column 3, lines 28-32) and does not disclose specifically that the hole (9) is polished or finished. With further respect to claim 23, it would have been obvious to one of ordinary skill in the art at the time the invention was made to ream the needle, since it is well known in the art to ream holes in needles for suture attachment (for example, see Yokichi Nakayama's Patent No. JPO2002034992A).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Tyson whose telephone number is (571) 272-9062. The examiner can normally be reached on Monday through Thursday 9-5:30, Fridays 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should



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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie Tyson  
June 22, 2007

*MT*

  
ANH TUAN T. NGUYEN  
SUPERVISORY PATENT EXAMINER

*6/25/07*